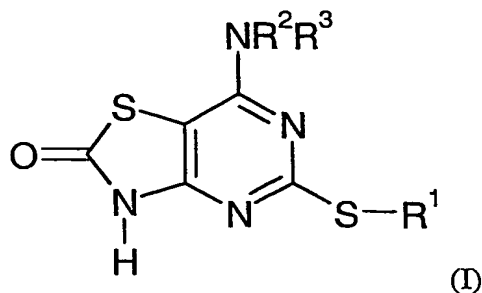


**CLAIMS**

1. A method for the preparation of a compound of formula (I) or a pharmaceutically acceptable salt or solvate thereof:

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in which

- $R^1$  represents a  $C_3$ - $C_7$  carbocyclic,  $C_1$ - $C_8$  alkyl,  $C_2$ - $C_6$  alkenyl or  $C_2$ - $C_6$  alkynyl group, each of the groups being optionally substituted by one or more substituent groups independently selected from halogen atoms,  $-OR^4$ ,  $-NR^5R^6$ ,  $-CONR^5R^6$ ,  $-COOR^7$ ,  $-NR^8COR^9$ ,  $-SR^{10}$ ,  $-SO_2R^{10}$ ,  $-SO_2NR^5R^6$ ,  $-NR^8SO_2R^9$  or an aryl or heteroaryl group, both of which may be optionally substituted by one or more substituents independently selected from halogen atoms, cyano, nitro,  $-OR^4$ ,  $-NR^5R^6$ ,  $-CONR^5R^6$ ,  $-COOR^7$ ,  $-NR^8COR^9$ ,  $-SR^{10}$ ,  $-SO_2R^{10}$ ,  $-SO_2NR^5R^6$ ,  $-NR^8SO_2R^9$ ,  $C_1$ - $C_6$  alkyl or trifluoromethyl groups;
- $R^2$  and  $R^3$  each independently represent a hydrogen atom, or a  $C_3$ - $C_7$  carbocyclic,  $C_1$ - $C_8$  alkyl,  $C_2$ - $C_6$  alkenyl or  $C_2$ - $C_6$  alkynyl group, the latter four groups may be optionally substituted by one or more substituent groups independently selected from:
- (a) halogen atoms,  $-OR^4$ ,  $-NR^5R^6$ ,  $-CONR^5R^6$ ,  $-COOR^7$ ,  $-NR^8COR^9$ ,  $-SR^{10}$ ,  $-SO_2R^{10}$ ,  $-SO_2NR^5R^6$ ,  $-NR^8SO_2R^9$ ;
  - (b) a 3-8 membered ring optionally containing one or more atoms selected from O, S,  $NR^8$  and itself optionally substituted by  $C_1$ - $C_3$ -alkyl or halogen; or
  - (c) an aryl group or heteroaryl group each of which may be optionally substituted by one or more substituents independently selected from halogen atoms, cyano, nitro,  $-OR^4$ ,  $-NR^5R^6$ ,  $-CONR^5R^6$ ,  $-NR^8COR^9$ ,  $-SO_2NR^5R^6$ ,  $-NR^8SO_2R^9$ ,  $C_1$ - $C_6$  alkyl and trifluoromethyl groups;

$R^4$  represents hydrogen,  $C_1$ - $C_6$  alkyl or a phenyl group the latter two of which may be optionally substituted by one or more substituent groups independently selected from halogen atoms, phenyl,  $-OR^{11}$  and  $-NR^{12}R^{13}$

$R^5$  and  $R^6$  independently represent a hydrogen atom or a  $C_1$ - $C_6$  alkyl or phenyl group the latter two of which may be optionally substituted by one or more substituent groups independently selected from halogen atoms, phenyl,  $-OR^{14}$  and  $-NR^{15}R^{16}$ ,  $-CONR^{15}R^{16}$ ,  $-NR^{15}COR^{16}$ ,  $-SONR^{15}R^{16}$ ,  $NR^{15}SO_2R^{16}$

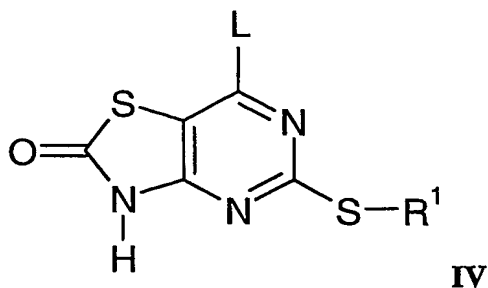
or

$R^5$  and  $R^6$  together with the nitrogen atom to which they are attached form a 4- to

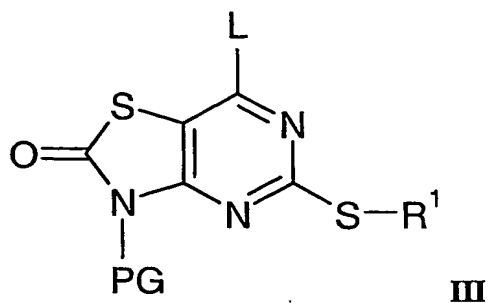
- 10 7-membered saturated heterocyclic ring system optionally containing a further heteroatom selected from oxygen and nitrogen atoms, which ring system may be optionally substituted by one or more substituent groups independently selected from phenyl,  $-OR^{14}$ ,  $-COOR^{14}$ ,  $-NR^{15}R^{16}$ ,  $-CONR^{15}R^{16}$ ,  $-NR^{15}COR^{16}$ ,  $-SONR^{15}R^{16}$ ,  $NR^{15}SO_2R^{16}$  or  $C_1$ - $C_6$  alkyl, itself optionally substituted by one or more substituents independently selected from halogen atoms and  $-NR^{15}R^{16}$  and  $-OR^{17}$  groups;

$R^{10}$  represents a hydrogen atom or a  $C_1$ - $C_6$ -alkyl or a phenyl group, the latter two of which may be optionally substituted by one or more substituent groups independently selected from halogen atoms, phenyl,  $-OR^{17}$  and  $-NR^{15}R^{16}$ ; and

- each of  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$  independently represents a hydrogen atom  
20 or a  $C_1$ - $C_6$  alkyl, or a phenyl group.  
which method comprises contacting

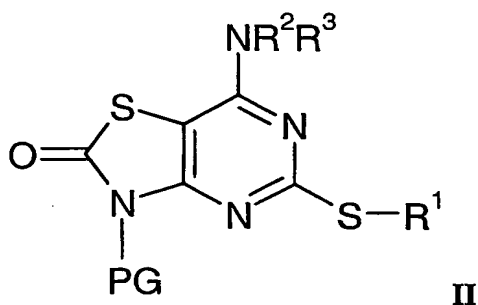


- 25 wherein L is a leaving group  
with a thiazole nitrogen protecting group reagent under appropriate reaction conditions to form a compound of the formula



wherein PG is a protecting group,

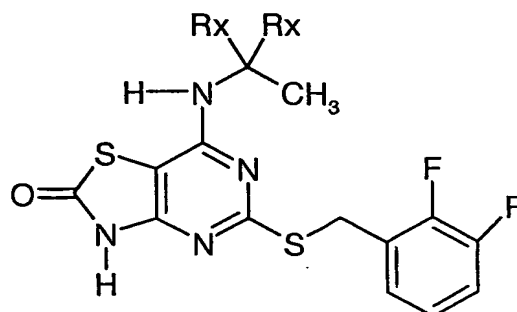
- 5 reacting the compound of formula III with an amine of formula  $\text{HNR}^2\text{R}^3$   
to form a compound of formula



- and deprotection of the compound of formula II to give a compound of the formula I, and  
10 simultaneous or sequential conversion to a pharmaceutically acceptable salt or solvate thereof.

2. A method as claimed in claim 1 and wherein  $\text{R}^1$  represents an optionally substituted benzyl group.
- 15 3. A method as claimed in claim 1 or claim 2 and wherein one of  $\text{R}^2$  or  $\text{R}^3$  is hydrogen and the other is  $\text{C}_1\text{-C}_8$  alkyl substituted by hydroxy and one or more methyl or ethyl groups.

4. A method as claimed in claim 1 for the preparation of compounds of the formula Ia



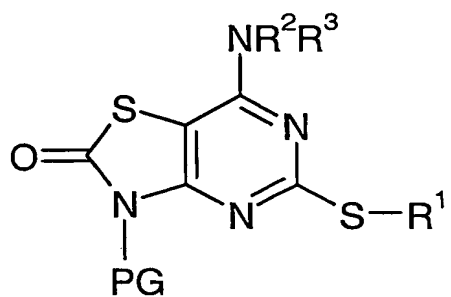
Ia

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wherein each  $R^X$  is independently selected from hydrogen, a  $C_{1-4}$  alkyl group optionally substituted by hydroxy, amino,  $-O-C_{1-4}$  alkyl,  $-S-C_{1-4}$  alkyl,  $-N-C_{1-4}$  alkyl,  $-NHSO_2R$ , or  $-CONR_2$  and provided that both  $R^X$  are not hydrogen or amino.

- 10 5. A method as claimed in claim 1 wherein each  $R^X$  is independently selected from hydrogen and hydroxymethyl, provided that both  $R^X$  are not hydrogen.

6. A compound of the formula



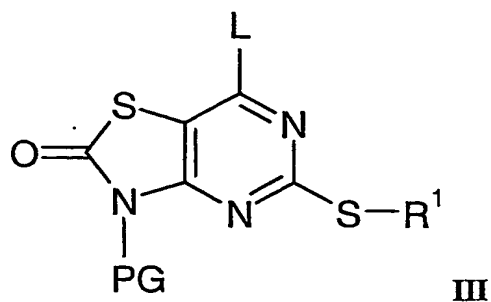
II

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or a pharmaceutically acceptable salt or solvate thereof and wherein PG,  $R^2$ ,  $R^3$  and  $R^1$  have the meanings stated in claim 1.

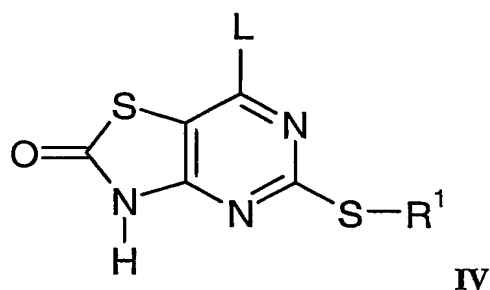
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7. A compound of the formula



5 or a pharmaceutically acceptable salt or solvate thereof and wherein PG, L and R<sup>1</sup> have the meanings stated in claim 1.

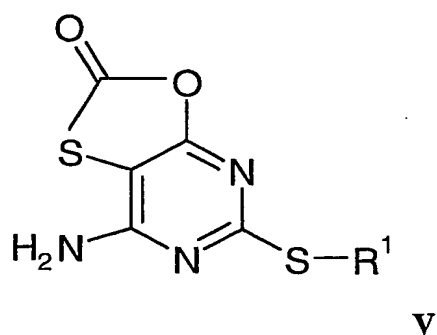
8. A compound of the formula



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or a pharmaceutically acceptable salt or solvate thereof and wherein L is a leaving group other than chlorine and R<sup>1</sup> has the meaning stated in claim 1.

15 9. A compound of the formula



or a pharmaceutically acceptable salt or solvate thereof and wherein R<sup>1</sup> has the meaning stated in claim 1.

10. A compound selected from

- 5 5-[[[(2,3-difluorophenyl)methyl]thio]-7-[[[(1R)-2-hydroxy-1-methylethyl]amino]thiazolo[4,5-  
*d*]pyrimidin-2(3H)-one, potassium salt;  
5-[[[(2,3-difluorophenyl)methyl]thio]-7-[[2-hydroxy-1-(hydroxymethyl)-1-  
methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3H)-one, sodium salt; and  
5-[[[(2,3-difluorophenyl)methyl]thio]-7-[[2-hydroxy-1-(hydroxymethyl)-1-  
10 methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3H)-one, potassium salt.